

Work Order ID 84990

84990

Page 1

Item ID: D2572

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Saddle, Fwd In 205

Start Date: 30/05/2012 Start Qty: 12.00

12

Cust Item ID:

Required Date: 08/06/2012 Req'd Qty: 12.00

12

Customer:

Reference:

Approvals: Process Plan: MLJ Date: 12/05/31

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D2572

Rev E

100

0.00

100

HAAS CNC VERTICAL MACHINING #1

20 12.7.30

HAAS I

Memo

0.00

HAAS CNC vertical machine #1

Program Batch No. 84990

Double check by: SL

SL 12-04-31

1-Machine Step No 1 per Folio FA051 and inspect per attached Dimension

Sheets

2-Machine Step No 2 per Folio FA051 and inspect per attached Dimension

Sheets

3-Machine Step No 3 per Folio FA051 and insp

110

0.00

110

CONVENTIONAL MILLING MACHINE

20 12.7.30

Mill Conv

Memo

0.00

Conventional Milling Machine

Machine keyway as per dwg D2571 & D2572

SL 12-04-31

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 84990

84990

Page 2

May-31-12 9:13:15 AM

Item ID: D2572

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Saddle, Fwd In 205

Start Date: 30/05/2012 Start Qty: 12.00

12

Cust Item ID:

Required Date: 08/06/2012 Req'd Qty: 12.00

12

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

QC2- Inspect parts off machine FAI/FAIB

0.00

120

QC

Memo

0.00

Quality Control

12-7-3-

12

0

12-07-31

130

QC8- Inspect parts - second check

0.00

130

QC

Memo

0.00

Quality Control

12/08/02

12

0

140

Chemical Conversion Coat per QSI005 4.1

0.00

140

HandFinish

Memo

0.00

Hand Finishing

12

0

12/08/03

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 84990

84990

Page 4

May-31-12 9:13:15 AM

Item ID: D2572

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Saddle, Fwd In 205

Start Date: 30/05/2012 Start Qty: 12.00

12

Cust Item ID:

Required Date: 08/06/2012 Req'd Qty: 12.00

12

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

180

QC21- Final Inspection - Work Order Release

0.00

180

QC

Memo

0.00

Quality Control

12/18/12

MW 12/08/07

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

May-31-12 9:13:19 AM

Page 1

Work Order ID: 84990

84990

Parent Item: D2572

D2572

Parent Item Name: Saddle, Fwd In 205

Start Date: 30/05/2012

Required Date: 08/06/2012

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP: 102.10.02Re-format; Change to Dwg Rev. D & incorporated
D2572KJ

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-005		Manufactured	No			100	Each	25.0000	1	12			

D6101-005

**

20 12-7-30

Saddle Billet

Location	Loc Qty	Loc Code
MAT041	2	
76838	2	
MAT044	23	
79874	19	
81973	4	

87265

12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	24990
Description: Saddle, Fwd Inboard		Part Number:	D2572
Inspection Dwg: D2572 Rev. E		Page 1 of 1	

Inspect dimensions highlighted on inspection sheet drawing D2572 Rev. E and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				1	2	3	4		
A	0.438	0.443		.438	.438	.438	.438		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.005	8.005	8.005	8.005		
F	0.490	0.510		.500	.500	.500	.500		
G	0.257	0.262		.258	.258	.258	.258		
H	0.375	0.380		.376	.376	.376	.376		
I	0.490	0.510		.499	.499	.499	.499		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.565	.565	.565	.565		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.490	1.500		1.495	1.495	1.495	1.495		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	3.869	3.879		3.874	3.874	3.874	3.874		
P	0.115	0.135		.127	.127	.127	.127		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.252	.252	.252	.252		
S	0.115	0.135		.128	.128	.128	.128		
T	0.178	0.198		.188	.188	.188	.188		
U	2.940	2.980		2.960	2.960	2.960	2.960		
V	0.230	0.250		.240	.240	.240	.240		
W	0.115	0.135		.134	.134	.134	.134		
X	0.307	0.312		.310	.310	.310	.310		
Y	0.760	0.765		.763	.763	.763	.763		
Z	0.352	0.372		.362	.362	.362	.362		
AA	0.470	0.530		.50	.50	.50	.50		
AB	0.615	0.635		.627	.627	.627	.627		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.245	.245	.245	.245		
AE	1.375	1.395		1.390	1.390	1.390	1.390		
AF	0.115	0.135		.135	.135	.135	.135		
AG	0.240	0.280		.260	.260	.260	.260		
AH	0.240	0.260		.250	.250	.250	.250		
AI	2.000	2.020		2.003	2.003	2.003	2.003		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by:	24
Date:	12-7-30

Audited by:	h.e
Date:	12/08/02

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	24990
Description: Saddle, Fwd Inboard		Part Number:	D2572
Inspection Dwg: D2572 Rev. E		Page 1 of 1	

Inspect dimensions highlighted on inspection sheet drawing D2572 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	15	26	24	18	By	Date
A	0.438	0.443		.438	.438	.438	.438		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.000	8.000	8.000	8.000		
F	0.490	0.510		.500	.500	.500	.500		
G	0.257	0.262		.258	.258	.258	.258		
H	0.375	0.380		.376	.376	.376	.376		
I	0.490	0.510		.500	.500	.500	.500		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.568	.568	.568	.568		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.490	1.500		1.495	1.495	1.495	1.495		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	3.869	3.879		3.874	3.874	3.874	3.874		
P	0.115	0.135		.125	.125	.125	.125		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.250	.250	.250	.250		
S	0.115	0.135		.124	.124	.124	.124		
T	0.178	0.198		.188	.188	.188	.188		
U	2.940	2.980		2.960	2.960	2.960	2.960		
V	0.230	0.250		.238	.238	.238	.238		
W	0.115	0.135		.130	.130	.130	.130		
X	0.307	0.312		.310	.310	.310	.310		
Y	0.760	0.765		.763	.763	.763	.763		
Z	0.352	0.372		.362	.362	.362	.362		
AA	0.470	0.530		.50	.50	.50	.50		
AB	0.615	0.635		.627	.627	.627	.627		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.245	.245	.245	.245		
AE	1.375	1.395		1.388	1.388	1.388	1.388		
AF	0.115	0.135		.135	.135	.135	.135		
AG	0.240	0.280		.260	.260	.260	.260		
AH	0.240	0.260		.248	.249	.249	.247		
AI	2.000	2.020		2.003	2.003	2.003	2.003		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by:	RF
Date:	12-07-31

Audited by:	B.A
Date:	12/08/02

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

4725

DART AEROSPACE LTD	Work Order: 24990
Description: Saddle, Fwd Inboard	Part Number: D2572
Inspection Dwg: D2572 Rev. E	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2572 Rev. E and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				A ₉	A ₁₀	A ₁₁	A ₁₂		
A	0.438	0.443		.438	.438	.438	.438		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.001	7.996	7.994	7.998		
F	0.490	0.510		.498	.497	.496	.496		
G	0.257	0.262		.258	.258	.258	.258		
H	0.375	0.380		.376	.376	.376	.376		
I	0.490	0.510		.500	.500	.499	.500		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.567	.567	.566	.568		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.490	1.500		1.495	1.495	1.495	1.495		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	3.869	3.879		3.874	3.874	3.874	3.874		
P	0.115	0.135		.125	.125	.125	.125		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.250	.250	.251	.249		
S	0.115	0.135		.125	.125	.124	.126		
T	0.178	0.198		.188	.188	.188	.188		
U	2.940	2.980		2.960	2.960	2.960	2.960		
V	0.230	0.250		.239	.240	.240	.239		
W	0.115	0.135		.129	.126	.125	.125		
X	0.307	0.312		.310	.310	.310	.310		
Y	0.760	0.765		.763	.763	.763	.763		
Z	0.352	0.372		.363	.362	.362	.362		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.627	.627	.627	.627		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.247	.248	.247	.249		
AE	1.375	1.395		1.389	1.389	1.390	1.389		
AF	0.115	0.135		.135	.135	.135	.135		
AG	0.240	0.280		.260	.260	.260	.260		
AH	0.240	0.260		.249	.248	.249	.247		
AI	2.000	2.020		2.004	2.004	2.005	2.004		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by: J
Date: 12-07-31

Audited by: B. a
Date: 12/08/02

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

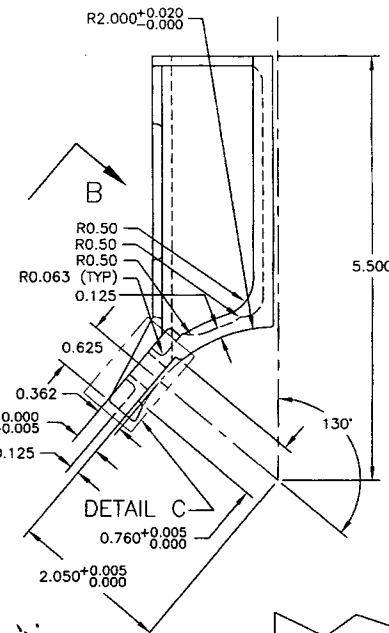
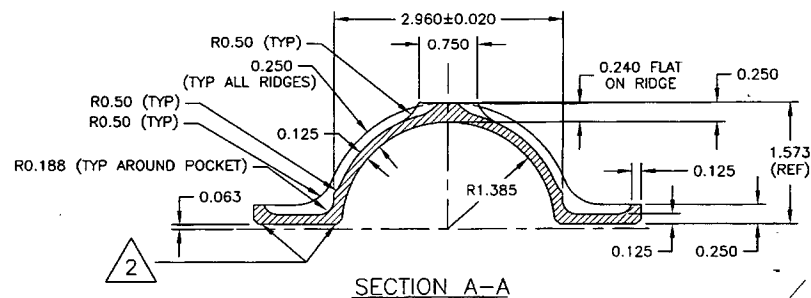
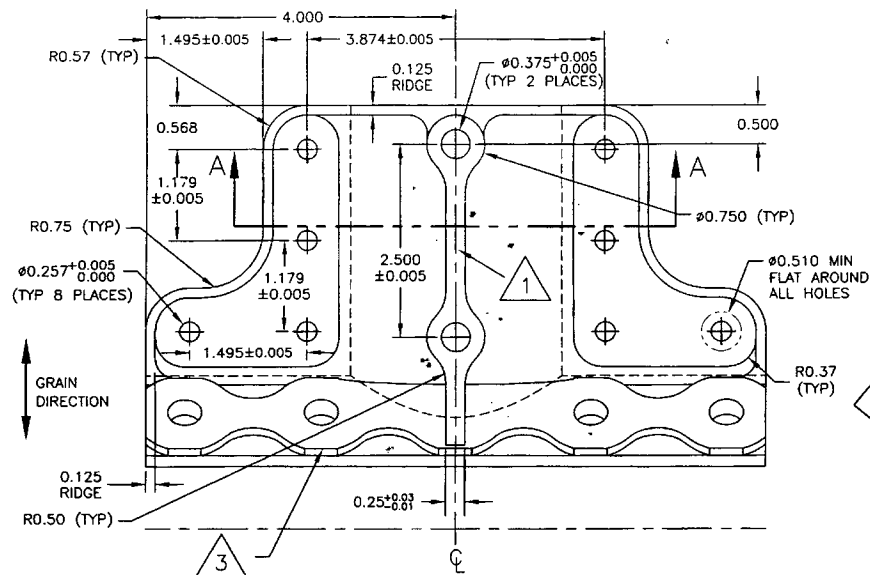
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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RELEASED

05.12.06

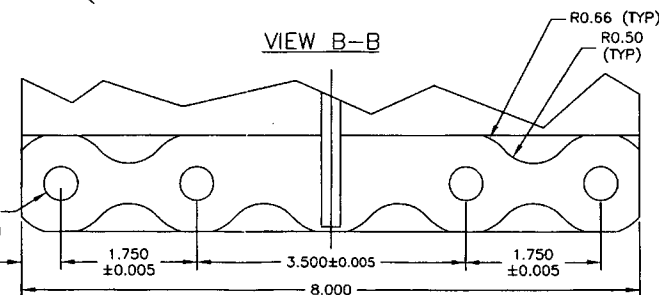


NOTES

MATERIAL: 7075-T7351 (QQ-A-250/12)
 (REF DART SPEC. D6102-003)
 FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1
 POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER
 DART QSI 005 4.3
 BREAK ALL SHARP EDGES 0.010 TO 0.020
 TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

- 1 ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX DEPTH OF 0.010
 2 CHAMFER 0.063" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES)
 3 CHAMFER 0.063 x 45° ALL AROUND
 4 CHAMFER 0.033 x 45° (SEE DETAIL C) E

VIEW B-B



E	05.07.13	ADD CHAMFER ON RIDGE NOTE 4
D	02.09.06	ADD RIDGES; TIGHTEN TOLERANCES
C	99.10.22	INCORP. DEO 9123/9079/9102 ADD DIMENSIONS PER TSR A1177
B	96.12.02	ADD GRAIN DIR., 0.438 WAS 0.425
A	96.09.16	NEW ISSUE

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 THAT IT IS NOT TO BE USED FOR ANY PURPOSE
 OR COPIED OR COMMUNICATED TO ANY OTHER
 PERSON WITHOUT WRITTEN PERMISSION FROM
 DART AEROSPACE LTD.

DESIGN	DS	DRAWN BY	PH	DART	DART AEROSPACE LTD. HAMPSHIRE, ONTARIO, CANADA
CHECKED	#	APPROVED	#	DRAWING NO.	D2572
DATE	05.07.13	TITLE	INNER FWD SADDLE	REV. E	SHEET 1 OF 1
		SCALE	2:3		

RETURN TO
 ENGINEERING
 UNCONTROLLED

DETAIL C
 SCALE 2:1

SUBJECT TO AMENDMENT

WITHOUT NOTICE
 WORK ORDER

NO 24990 MLJ
 12/05/31

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries